



SequenceListing-10-806419  
SEQUENCE LISTING

<110> Papatnassiu, Adonia  
<120> Compositions and Methods for Inhibiting Angiogenesis  
<130> A8448  
<150> 09/935,145  
<151> 2001-08-22  
<150> 60/227,152  
<151> 2000-08-22  
<160> 23  
<170> PatentIn version 3.3  
<210> 1  
<211> 24  
<212> PRT  
<213> Artificial Sequence  
<220>  
<223> Synthetic peptide  
<400> 1  
Phe Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg Ala Gln  
1 5 10 15  
  
Ser Arg Glu Gln Leu Ala Ala Leu  
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<210> 2  
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Phe Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg Ala Arg  
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Ala Lys Glu Gln Leu Ala Ala Leu  
20  
  
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<400> 3  
Phe Val Lys Arg Glu Arg Ala Thr Glu Asp Phe Phe Val Arg Gln Arg  
1 5 10 15

SequenceListing-10-806419

Glu Lys Glu Gln Leu Arg His Leu  
20

<210> 4  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic peptide

<400> 4

Gly Met Asp Glu Leu Ser Glu Glu Asp Lys Leu Thr Val Ser Arg Ala  
1 5 10 15

Arg Lys Ile Gln Arg Phe  
20

<210> 5  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 5

Gly Ser Asp Gln Ser Glu Asn Val Asp Arg Gly Ala Gly Ser Ile Arg  
1 5 10 15

Glu Ala Gly Gly Ala Phe Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg  
20 25 30

Tyr Phe Arg Ala Gln Ser Arg Glu Gln Leu Ala Ala Leu Lys Lys His  
35 40 45

His Glu Glu Glu Ile Val His His Lys Lys Glu Ile Glu Arg Leu Gln  
50 55 60

Lys Glu Ile Glu Arg His Lys Gln Lys Ile Lys Met Leu Lys His Asp  
65 70 75 80

Asp

<210> 6  
<211> 539  
<212> PRT  
<213> Homo sapiens

<400> 6

Met Thr Ser Leu Trp Gly Lys Gly Thr Gly Cys Lys Leu Phe Lys Phe  
1 5 10 15

SequenceListing-10-806419

Arg Val Ala Ala Ala Pro Ala Ser Gly Ala Leu Arg Arg Leu Thr Pro  
20 25 30

Ser Ala Ser Leu Pro Pro Ala Gln Leu Leu Leu Arg Ala Val Arg Arg  
35 40 45

Arg Ser His Pro Val Arg Asp Tyr Ala Ala Gln Thr Ser Pro Ser Pro  
50 55 60

Lys Ala Gly Ala Ala Thr Gly Arg Ile Val Ala Val Ile Gly Ala Val  
65 70 75 80

Val Asp Val Gln Phe Asp Glu Gly Leu Pro Pro Ile Leu Asn Ala Leu  
85 90 95

Glu Val Gln Gly Arg Glu Thr Arg Leu Val Leu Glu Val Ala Gln His  
100 105 110

Leu Gly Glu Ser Thr Val Arg Thr Ile Ala Met Asp Gly Thr Glu Gly  
115 120 125

Leu Val Arg Gly Gln Lys Val Leu Asp Ser Gly Ala Pro Ile Lys Ile  
130 135 140

Pro Val Gly Pro Glu Thr Leu Gly Arg Ile Met Asn Val Ile Gly Glu  
145 150 155 160

Pro Ile Asp Glu Arg Gly Pro Ile Lys Thr Lys Gln Phe Ala Pro Ile  
165 170 175

His Ala Glu Ala Pro Glu Phe Met Glu Met Ser Val Glu Gln Glu Ile  
180 185 190

Leu Val Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro Tyr Ala Lys  
195 200 205

Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val  
210 215 220

Leu Ile Met Glu Leu Ile Asn Asn Val Ala Lys Ala His Gly Gly Tyr  
225 230 235 240

Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly Asn Asp Leu  
245 250 255

Tyr His Glu Met Ile Glu Ser Gly Val Ile Asn Leu Lys Asp Ala Thr  
260 265 270

Ser Lys Val Ala Leu Val Tyr Gly Gln Met Asn Gln Pro Pro Gly Ala  
275 280 285

SequenceListing-10-806419

Arg Ala Arg Val Ala Leu Thr Gly Leu Thr Val Ala Glu Tyr Phe Arg  
 290 295 300  
 Asp Gln Glu Gly Gln Asp Val Leu Leu Phe Ile Asp Asn Ile Phe Arg  
 305 310 315 320  
 Phe Thr Gln Ala Gly Ser Glu Val Ser Ala Leu Leu Gly Arg Ile Pro  
 325 330 335  
 Ser Ala Val Gly Tyr Gln Pro Thr Leu Ala Thr Asp Met Gly Thr Met  
 340 345 350  
 Gln Glu Arg Ile Thr Thr Thr Lys Lys Gly Ser Ile Thr Ser Val Gln  
 355 360 365  
 Ala Ile Tyr Val Pro Ala Asp Asp Leu Thr Asp Pro Ala Pro Ala Thr  
 370 375 380  
 Thr Phe Ala His Leu Asp Ala Thr Thr Val Leu Ser Arg Ala Ile Ala  
 385 390 395 400  
 Glu Leu Gly Ile Tyr Pro Ala Val Asp Pro Leu Asp Ser Thr Ser Arg  
 405 410 415  
 Ile Met Asp Pro Asn Ile Val Gly Ser Glu His Tyr Asp Val Ala Arg  
 420 425 430  
 Gly Val Gln Lys Ile Leu Gln Asp Tyr Lys Ser Leu Gln Asp Ile Ile  
 435 440 445  
 Ala Ile Leu Gly Met Asp Glu Leu Ser Glu Glu Asp Lys Leu Thr Val  
 450 455 460  
 Ser Arg Ala Arg Lys Ile Gln Arg Phe Leu Ser Gln Pro Phe Gln Val  
 465 470 475 480  
 Ala Glu Val Phe Thr Gly His Met Gly Lys Leu Val Pro Leu Lys Glu  
 485 490 495  
 Thr Ile Lys Gly Phe Gln Gln Ile Leu Ala Gly Glu Tyr Asp His Leu  
 500 505 510  
 Pro Glu Gln Ala Phe Tyr Met Val Gly Pro Ile Glu Glu Ala Val Ala  
 515 520 525  
 Lys Ala Asp Lys Leu Ala Glu Glu His Ser Ser  
 530 535

# SequenceListing-10-806419

<210> 7  
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<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic peptide

<400> 7

Ser Leu Gln Asp Ile Ile Ala Ile Leu Gly Met Asp Glu Leu Ser Glu  
1 5 10 15

Glu Asp Lys Leu Thr Cys  
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<210> 8  
<211> 378  
<212> DNA  
<213> Mus musculus

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gaattcgagg tgaasgtggt ggaatctggg ggaggcttag tgaagcctgg aggggtccctg 60  
aaactctcct gtgcagcctc tggattcact ttcagtagct atgccatgtc ttgggttcgc 120  
cagactccag agaagagggt ggagtgggtc gcatccatta gtagtggtgg tagcacctac 180  
tatccagaca gtgtgaaggg ccgattcacc atctccagag ataatgccag gaacatcctg 240  
tacctgcaaa tgagcagtct gaggtctgag gacacggcca tgtattactg tgcaagaggc 300  
ctaccatttg cttactgggg ccaagggact ctggtcactg tctctgcaga gagtcagtcc 360  
ttcccaaattg tcagatct 378

<210> 9  
<211> 372  
<212> DNA  
<213> Mus musculus

<400> 9  
gagctcgata ttgtgatgac acaatctaca gcttccttag ctgtatctct ggggcagagg 60  
gccaccatct catgcagggc cagccaaagt gtcagtacat ctagctatag ttatatgcac 120  
tggtaccaac agaaaccagg acagccaccc aaactcctca tcaagtatgc atccaaccta 180  
gaatctgggg tccctgccag gttcagtggc agtgggtctg ggacagactt caccctcaac 240  
atccatcctg tggaggagga ggatactgca acatattact gtcagcacag ttgggagatt 300  
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360  
gtatccgcat gc 372

<210> 10  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>

SequenceListing-10-806419

<223> PCR primer

<220>

<221> misc\_feature

<222> (18)..(18)

<223> n is a, c, g, or t

<400> 10

cttccggaat tcsargtnma gctgsagsag tc

32

<210> 11

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

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<221> misc\_feature

<222> (18)..(18)

<223> n is a, c, g, or t

<400> 11

cttccggaat tcsargtnma gctgsagsag tcwgg

35

<210> 12

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 12

cctccggaat tccaggttac tctgaaagwg tstg

34

<210> 13

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 13

cttccggaat tcgaggtcca rctgcaacar tc

32

<210> 14

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 14

cttccggaat tccaggtcca actvcagcar cc

32

# SequenceListing-10-806419

<210> 15  
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 cttccggaat tcgatgtgaa cttggaagtg tc 32  
  
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 ggaagatctg acatttggaaggactgact ctc 33  
  
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 ggtgcatgcg gatacagttg gtgcagcatc 30  
  
 <210> 20  
 <211> 122  
 <212> PRT  
 <213> Mus musculus

SequenceListing-10-806419

<220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> Xaa can be any naturally occurring amino acid

<400> 20

Glu Val Xaa Val Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly  
 1 5 10 15  
 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val  
 35 40 45  
 Ala Ser Ile Ser Ser Gly Gly Ser Thr Tyr Tyr Pro Asp Ser Val Lys  
 50 55 60  
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu  
 65 70 75 80  
 Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala  
 85 90 95  
 Arg Gly Leu Pro Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val  
 100 105 110  
 Ser Ala Glu Ser Gln Ser Phe Pro Asn Val  
 115 120

<210> 21  
 <211> 120  
 <212> PRT  
 <213> Mus musculus

<400> 21

Asp Ile Val Met Thr Gln Ser Thr Ala Ser Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Ser  
 20 25 30  
 Ser Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro  
 35 40 45  
 Lys Leu Leu Ile Lys Tyr Ala Ser Asn Leu Glu Ser Gly Val Pro Ala  
 50 55 60  
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His  
 65 70 75 80

SequenceListing-10-806419

Pro Val Glu Glu Glu Asp Thr Ala Thr Tyr Tyr Cys Gln His Ser Trp  
85 90 95

Glu Ile Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg  
100 105 110

Ala Asp Ala Ala Pro Thr Val Ser  
115 120

<210> 22  
<211> 14  
<212> PRT  
<213> Artificial Sequence  
  
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<223> Chemically synthesized synthetic peptide

<220>  
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<222> (1)..(1)  
<223> x1 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (2)..(2)  
<223> x2 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (3)..(3)  
<223> x3 is a negatively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (4)..(4)  
<223> x4 is 2-3 of any amino acid

<220>  
<221> MISC\_FEATURE~  
<222> (5)..(5)  
<223> x5 is 2-3 negatively charged amino acids

<220>  
<221> MISC\_FEATURE  
<222> (6)..(6)  
<223> x6 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (7)..(7)  
<223> x7 is 3-4 of any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (8)..(8)  
<223> x8 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (9)..(9)  
<223> x9 is any amino acid

SequenceListing-10-806419

<220>  
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 <222> (10)..(10)  
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<220>  
 <221> MISC\_FEATURE  
 <222> (11)..(11)  
 <223> X11 is any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (12)..(12)  
 <223> X12 is a positively charged amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (13)..(13)  
 <223> X13 is any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (14)..(14)  
 <223> X14 is a negatively charged amino acid

<400> 22

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 1 5 10

<210> 23  
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 <212> PRT  
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<220>  
 <223> Chemically synthesized synthetic peptide

<220>  
 <221> MISC\_FEATURE  
 <222> (1)..(1)  
 <223> X1 is a negatively charged amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (2)..(2)  
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<220>  
 <221> MISC\_FEATURE  
 <222> (3)..(3)  
 <223> X3 is a negatively charged amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (4)..(4)  
 <223> X4 is a positively charged amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (5)..(5)  
 <223> X5 is any amino acid

<220>

SequenceListing-10-806419

<221> MISC\_FEATURE  
<222> (6)..(6)  
<223> X6 is any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (7)..(7)  
<223> X7 is any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (8)..(8)  
<223> X8 is any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (9)..(9)  
<223> X9 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (10)..(10)  
<223> X10 is any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (11)..(11)  
<223> X11 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (12)..(12)  
<223> X12 is a positively charged amino acid

<220>  
<221> MISC\_FEATURE  
<222> (13)..(13)  
<223> X13 is any amino acid

<220>  
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<222> (14)..(14)  
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<220>  
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<222> (15)..(15)  
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1 5 10 15